

Application No. : 10/782,680  
Filed : February 18, 2004

REMARKS

Claims 12-24, 34-61, and 65-69 were pending in the application. By this paper, Applicant has cancelled Claim 66 without prejudice, amended Claims 12, 21, 23-24, 37, 50, 58, 61, and 65, and added new Claims 70-72. Accordingly, Claims 12-24, 34-61, 65, and 67-72 are presented for examination herein.

*Telephone Interview*

Per telephone conversation with the Examiner on March 5, 2010, the Examiner indicated that Claims 61 and 68, the status of which was not otherwise indicated in the Office Action, stand rejected under 35 U.S.C. §103 as being unpatentable over "*The Use of Dynamically Reconfigurable Protocol Stacks for Streaming Multimedia to Mobile Devices*" by Curran, et al. (2002 IEEE), in view of Patki, et al. (U.S. Patent No. 6,944,185). Accordingly, these will be discussed below.

*§101 Rejections*

1. Per pages 2-3 of the Office Action, Claims 12-20 and 50-54 stand rejected under 35 U.S.C. §101 as failing to meet the requirements of process claims in light of *In Re Bilski*. Specifically, the Examiner asserts that Claims 12-20 and 50-54 are directed to non-statutory subject matter as these recite methods which are not tied to a particular machine or apparatus.

In response thereto, Applicant has herein amended Claims 12 and 50 to recite a method of developing the specific protocol useful for delivery of content from a first node of a network to a second node thereof via a server entity of the first node. Applicant submits that Claims 12-20 and 50-54 as amended herein are tied to the server entity of the first node (a particular machine or apparatus). Thus, Claims 12-20 and 50-54 meet the requirements of process claims, thereby rendering the Examiner's rejection thereof moot.

2. Per pages 3-4 of the Office Action, Claims 21-23, 35-36 and 55-56 stand rejected under 35 U.S.C. §101 as allegedly failing to recite any physical components. Specifically, the Examiner asserts that Claims 21-23, 35-36 and 55-56 are software *per se* and cannot be categorized in one of the statutory categories of invention. Applicant respectfully submits that

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Claim 21 is directed to consumer premises equipment (CPE) having a software application running thereon, and hence by definition comprises apparatus. However, in order to more clearly recite the physical components of the CPE of Claim 21, Applicant has, by this paper, amended Claim 21 to recite the CPE comprising at least one software application running on a processor thereof. Support for this amendment is found at, *inter alia*, FIG. 5, item 504, and page 26, line 15 – page 27, line 10 of Applicant's specification as filed.

Applicant submits that Claims 21-23, 35-36 and 55-56 as amended herein recite the physical components of the CPE on which the software application is run. Hence, Claims 21-23, 35-36 and 55-56 are directed to statutory subject matter, and the Examiner's rejection thereof is rendered moot.

### *§103 Rejections*

1. Per page 4 of the Office Action and the aforementioned telephone conversation with the Examiner, Claims 12-21, 34-46, 50-61, 65-69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over "*The Use of Dynamically Reconfigurable Protocol Stacks for Streaming Multimedia to Mobile Devices*" by Curran, et al. (2002 IEEE; hereinafter referred to as "Curran"), in view of Patki, et al. (U.S. Patent No. 6,944,185; hereinafter referred to as "Patki"). In response thereto, Applicant provides the following remarks.

**Claim 12** – Applicant respectfully traverses the Examiner's §103 rejection of Claim 12 as being unpatentable over Curran in view of Patki.

Applicant notes that "*The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.*" *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). {emphasis in original} See MPEP 2143.01. Applicant further notes that "*The proper inquiry is 'whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.*" *In re Fulton*, 391 F.3d 1195 at 1200-01 (Fed. Cir. 2004). {emphasis in original} See MPEP 2143.01.

Applicant submits that there is no motivation to combine the teachings of Curran and Patki. A person of ordinary skill upon reading these references would not be motivated to

combine their teachings, and/or would not arrive at the invention of Claim 12. Specifically, Curran discloses an API set (protocol setup) which sits on top of an operating system, and on which developing applications are built (see Curran at page 948). Curran indicates that the applications built by the system discussed therein are configured to control movement of a device between heterogeneous networks, to block third party traffic, and to transcode. Curran is in no way concerned with the playback of the content delivered to the devices. Hence, even if Patki discloses enabling a user to control functions of the playback of content (a point which Applicant does not necessarily concede), there is simply no suggestion of the desirability of controlling the playback in the Curran reference. Accordingly, there is nothing in the prior art to suggest the desirability, and thus the obviousness, of making the combination of Curran and Patki.

However, in order to more clearly distinguish the invention of Claim 12 over the prior art, Applicant has by this paper amended the Claim to recite limitations relating to the one or more applications being subsequently downloaded to one or more CPE configured to launch the one or more applications, thereby enabling one or more second applications within the CPE to make use of individual ones of the first, second and third components. Support for this amendment may be found at, *inter alia*, page 22, lines 18-22 of Applicant's specification as filed.

Applicant respectfully submits that neither Curran nor Patki teaches or suggests the aforementioned limitation. Curran merely discloses the Chameleon middleware; per page 948, second column, last paragraph, under the heading "III. THE CHAMELEON FRAMEWORK" the Chameleon middleware:

*"...supports reconfigurable dissemination oriented communication. Chameleon fragments various media elements of a multimedia application, prioritizes them and broadcasts them over separate channels to be subscribed to at the receiver's own choice."*

Hence, in Chameleon, a single application is fragmented and sent in fragments (media elements) to the subscribers. Then, per page 949, first column, last sentence of the first paragraph, Patki states that:

*"...the object-oriented design process produces a hierarchy of classes, from which a collection of objects is instantiated to build a particular application."*

Thus, a subscriber device may piece together the fragments received from the network to create an application. However, nowhere does Curran disclose *other* applications in the CPE making use of individual ones of the fragments downloaded thereto.

Therefore, for at least the foregoing two distinct reasons, Applicant submits that Claim 12 as amended herein distinguishes over the art of record, and thus is not rendered obvious thereby.

**Claim 21** – Applicant respectfully traverses the Examiner's §103 rejection of Claim 21 as being unpatentable over Curran in view of Patki. Specifically, Applicant submits that there is nothing in the prior art to suggest the desirability, and thus the obviousness, of making the combination of Curran and Patki. See MPEP 2143.01, discussed *supra*.

However, in order to more clearly distinguish the invention of Claim 21, Applicant has by this paper amended Claim 21 to recite limitations relating to the first, second, and third software components being selected from among a plurality of sets of components provided to the CPE, the sets of components each being specific to a different protocol, the CPE being configured to assemble the first, second, and third software components into the at least one application having an appropriate protocol via at least an editor application. Support for this amendment may be found at, *inter alia*, page 23, lines 5-16 of Applicant's specification as filed.

Applicant respectfully submits that neither Patki nor Curran teaches or suggests the aforementioned limitations. The Examiner contends at page 5 of the Office Action that Curran discloses the CPE being configured to assemble the first, second and third components. However, even if one assumes, *arguendo*, the Examiner's contention to be correct, nowhere does Curran disclose (i) the components being selected from among a plurality of sets of components provided to the CPE, (ii) the sets of components each being specific to a different protocol, and/or (iii) the CPE assembling the components into an application having an appropriate protocol via an editor application. The Chamaeleon system merely defines an application configuration only for a specific network protocol. That is to say, even if the CPE in Curran were capable of assembling an application given various components, there is simply no

teaching or suggestion in Curran of the CPE doing so from among a plurality of sets of components each being specific to a *different* protocol, in order to assemble an application having an appropriate protocol.

Therefore, Applicant respectfully submits that Claim 21 as amended herein distinguishes over the prior art cited by the Examiner on multiple distinct bases, and thus is not rendered unpatentable thereby.

**Claim 34** – Applicant respectfully traverses the Examiner’s §103 rejection of Claim 34 as being unpatentable over Curran in view of Patki.

a. Applicant notes that the Examiner has failed to indicate where it is believed either reference teaches or suggests “*specifying to said CPE a channel on which on-demand content may be accessed by said CPE*” as recited in Claim 34. Applicant submits that neither reference teaches or suggests the aforementioned limitation.

Curran merely discloses a Chameleon middleware which communicates between the home agent and a multimedia server (see e.g., FIG. 2). Curran does not disclose the Chameleon communicating to the CPE the channel on which on-demand content may be accessed. For example, at page 948, second column, last paragraph – page 949, first column, first paragraph, Curran states that “[c]lients are free to ‘move’ between differing quality multicast groups in order to receive the highest quality (or move to a lower quality group for the greater good of minimising network congestion...” Hence, in Curran the devices are configured to determine which “channel” to choose (i.e., which multicast to receive) without assistance of the Chameleon middleware.

With respect to Patki, Applicant notes that a depacketization module which depacketizes data streams (see e.g., Abstract of Patki) is given. However, nowhere does Patki seemingly disclose specifying to the CPE a channel on which on-demand content may be accessed.

b. The Examiner has further failed to indicate where it is believed either reference teaches or suggests (i) each component of the set of first components, the set of second components, and the set of third components being associated with different multiple systems operator (MSO) environments, and (ii) in response to a request for a particular application

within a given MSO network, assembling and delivering individual ones of the set of first components, the set of second components, and the set of third components associated with the given MSO. Applicant respectfully submits that neither Patki nor Curran teaches or suggests the aforementioned limitations.

5 Even if one were to assume *arguendo* that the Examiner assertion that Curran discloses a Chameleon middleware having the functions of the first and second components, and that Patki discloses functionality of the third component recited in Claim 34, nowhere does Curran and/or Patki disclose these components comprising sets of components each associated with different MSO environments. Rather, the cited references both merely disclose a single MSO  
10 environment. Furthermore, neither reference discloses in response to a request for a particular application in a given MSO network assembling and delivering individual ones of the first set, second set and third set of components associated with the given MSO.

Thus, Claim 34 is not rendered obvious given these references.

15 c. Applicant further submits that the references cited by the Examiner do not identify or solve the problem addressed by the invention of Claim 34. “[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ which should always be considered in determining the obviousness of an invention under  
20 U.S.C. § 103.” *In re Spinnable*, 405 F.2d 578, 585 (CCPA 1969). {emphasis added} See MPEP 2141.02. A problem addressed by the invention of Claim 34 herein relates to enabling the assembly of an application specific to a particular MSO network given a plurality of components which are associated to several different MSO networks. The teachings of Curran are merely aimed at providing a mechanism for delivery of a single application in fragments to a  
25 plurality of devices (see e.g., page 948, second column, last paragraph, under the heading “III. THE CHAMELEON FRAMEWORK”); Curran in no way recognizes the problem identified and solved by the invention of Claim 34, thereby providing another independent basis for refuting the Examiner’s assertions regarding obviousness.

Accordingly, based at least on a. - c. above, Claim 34 is patentably distinguishable over  
30 the prior art cited by the Examiner, and respectfully not rendered obvious thereby.

**Claim 37** – Applicant respectfully traverses the Examiner’s §103 rejection of Claim 37 as being unpatentable over Curran in view of Patki.

Applicant notes that the Examiner has failed to indicate where it is believed either reference teaches or suggests (i) a pre-existing and network-specific protocol having at least one extension thereof, the third module being adapted to understand the extension, and (ii) enabling the content to be presented according to one or more requested functional modes available to the network-specific protocol based at least in part on the extension. Applicant respectfully submits that neither Patki nor Curran teaches or suggests the aforementioned limitations.

Applicant submits that neither reference teaches or suggests a pre-existing and network-specific protocol having at least one extension thereof. Rather, even if one assumes *arguendo* the references disclose a pre-existing network specific protocol (a point which Applicant does not concede), nowhere is an extension thereof taught or suggested. That is to say, the applications in Curran may, for example, utilize a pre-existing network specific protocol; however, there is no discussion of the capabilities thereof being extended as is recited in Claim 37. By this paper, Applicant has amended Claim 37 to clarify this distinction.

Further, even if one assumes the Examiner’s argument that Patki discloses a third module is correct, Patki simply does not disclose the third module being adapted to understand an extension and/or controlling at least one of the act of communicating and the act of processing based at least in part on the extension.

Therefore, Applicant respectfully submits that Claim 37 as amended herein distinguishes over the prior art cited by the Examiner and thus is not rendered unpatentable thereby.

**Claim 46** – Applicant respectfully traverses the Examiner’s §103 rejection of Claim 37 as being unpatentable over Curran in view of Patki.

Applicant notes that the Examiner has failed to indicate where it is believed either reference teaches or suggests a software application adapted to be utilized by more than one application having permissions from an OCAP monitor and simultaneously running on the CPE as recited in Claim 46. Applicant respectfully submits that none of the references cited by the Examiner, including Patki and/or Curran, teach or suggest the aforementioned limitation.

Curran merely discloses utilization of the Chameleon middleware by the devices and the building of an application. The application in Curran is nowhere discussed as being utilized by more than one application having permission from an OCAP monitor and simultaneously running on the CPE. Rather, the given application is the only application discussed as being  
5 utilized on the CPE. Other applications, including applications having permissions from an OCAP monitor, are simply not discussed.

Since neither of the references cited by the Examiner, including Curran and/or Patki, teaches or suggests the limitations of Claim 46, Claim 46 is not rendered unpatentable thereby.

10 **Claim 50** – Applicant respectfully traverses the Examiner’s §103 rejection of Claim 50 as being unpatentable over Curran in view of Patki.

Applicant notes that the Examiner has provided no citation to where it is believed that either reference teaches or suggests developing at least one path to the media interface components, the path being accessible only to authorized entities as recited in Claim 50.

15 Applicant submits that neither reference teaches or suggests the aforementioned limitation.

Curran merely discloses utilization of the Chameleon middleware by the devices and the building of an application. Even if one were to assume *arguendo* that the Chameleon middleware comprises a media interface component (a point which Applicant does not necessarily concede), neither reference discloses developing at least one path thereto. Still  
20 further, none of the references teach or suggest an authorized entity, much less the path being accessible only to an authorized entity.

Therefore, Applicant submits that Claim 50 is not rendered unpatentable given Curran and/or Patki, whether taken alone or in combination.

25 **Claim 61** – Applicant respectfully traverses the Examiner’s §103 rejection of Claim 61 as being unpatentable over Curran in view of Patki.

Applicant notes that the Examiner has failed to indicate where it is believed either reference teaches or suggests (i) upstream and downstream communication between a CPE and a headend entity of an HFC network having at least one extension thereof, (ii) a third module  
30 being adapted to understand the extension, and (iii) enabling the content to be presented



utilizing one or more functional trick modes available to the network-specific protocol based at least in part on the extension. Applicant submits that none of the references teaches or suggests the aforementioned limitations.

5 However, in order to more clearly set forth the invention of Claim 61, Applicant has by this paper amended the claim to recite (i) a Java Media Framework (JMF) having at least a Java data source for upstream and downstream communication between a CPE and a headend entity of an HFC network, (ii) a Java media handler for processing content delivered to the headend entity of the HFC network, and (iii) wherein one or more remote applications are able to call and set commit prefixes to the JMF. Support for these amendments is replete throughout  
10 Applicant's specification as filed, including at *inter alia*, page 20, line 12 – page 21, line 10 thereof.

Applicant submits that none of the references cited by the Examiner teaches or suggests the aforementioned limitations. In particular, although Curran generally discloses a Java middleware (see e.g., page 947, first column, second paragraph), nowhere doe Curran disclose  
15 the JMF having at least a Java data source for upstream and downstream communication between a CPE and a headend entity, and/or a Java media handler for processing content delivered to the headend entity of the HFC network. Even if one assumes *arguendo* that the data source and media handler are somehow intrinsic to the Java language, there is no teaching or suggestion in Curran to use them as applicant has (i.e., for upstream and downstream  
20 communication between a CPE and a headend entity, and for processing content delivered to the headend entity of the HFC network, respectively) in Claim 61 as amended.

Still further, there is no teaching or suggestion in Curran (or Patki) of one or more remote applications being able to call and set prefixes to the JMF. If one assumes *arguendo* that the Chameleon disclosed in Curran comprises OCAP compliant middleware (a point which  
25 Applicant does not necessarily concede), OCAP does not allow an application to call the commit prefix methods, only the set prefix methods.

Therefore, Applicant submits that new Claim 61, as amended herein, distinguishes over the prior art and is not rendered obvious thereby.

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2. Per page 8 of the Office Action, Claims 22-24 and 47-49 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Curran in view of Patki and further in view of Logston, et al. (U.S. Patent No. 6,941,341; hereinafter referred to as "Logston").

Applicant respectfully submits that the Examiner's rejections of dependent Claims 22-24 are rendered moot, given the arguments and amendments discussed above with respect to independent Claim 21.

Applicant further submits that the Examiner's rejections of dependent Claims 47-49 are also rendered moot, given the arguments discussed above with respect to independent Claim 46.

#### *New Claims*

By this paper, Applicant has added new dependent Claims 70 and 72, and new independent Claim 71. Support for each are replete throughout Applicant's specification as filed.

New independent Claim 71 relates generally and without limitation to the subject matter of Claim 37, *et seq.* Applicant respectfully submits that for reasons generally similar to those presented *supra* for Claim 37 (i.e., presence of an MSO-specific protocol with a persistent JMF extension to that protocol, and a third module configured to control based at least in part on the JMF extension to the protocol), Claim 71 as presented herein is both novel and non-obvious over the prior art.

#### *Other Remarks*

Applicant hereby specifically reserves all rights of appeal (including those under the Pre-Appeal Brief Program), as well as the right to prosecute claims of different scope in another continuation or divisional application.

Applicant notes that any claim cancellations or additions made herein are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art or for patentability. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change in the Applicant's position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such cancellations or additions.

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Furthermore, any remarks made with respect to a given claim or claims are limited solely to such claim or claims.

If the Examiner has any questions or comments which may be resolved over the telephone, he is requested to call the undersigned at (858) 675-1670.

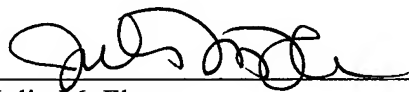
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Respectfully submitted,

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